

WHAT IS CLAIMED IS:

1. A driver circuit integrated with a load current output circuit, wherein said driver circuit integrated with a load current output circuit has a function as a driver for applying a predetermined test waveform to a device under test (DUT), and a function as a load current output for reproducing an actual use situation by receiving said load current to said DUT to judge a response waveform by receiving said response waveform from said DUT, both functions being made up on a common circuit, operates as said driver circuit when applying said test waveform, and operates as said load current output circuit when judging said response waveform.

2. A driver circuit integrated with a load current output circuit, comprising: a buffer circuit for a push-pull operation, a constant current portion, a current control portion connected to an output terminal of said buffer circuit and said constant current portion and constituted of an one-way conduction element capable of supplying a current of one direction or reversed direction with respect to said DUT, wherein said driver function and said load current output function are provided by controlling said current at said constant current portion.

3. A driver circuit integrated with a load current output circuit according to claim 2, wherein said current control portion comprises a first terminal connected to said buffer circuit, a second terminal connected to said constant current

portion, and a third terminal for supplying a current to said DUT.

4. A driver circuit integrated with a load current output circuit according to claim 2, wherein said buffer circuit is provided with switches for controlling the push-pull operation of said buffer circuit.

5. A driver circuit integrated with a load current output circuit according to claim 2, wherein said current control portion is a diode bridge circuit.

10 6. A driver circuit integrated with a load current output circuit, comprising: a first buffer circuit having a first output terminal; a second buffer circuit having a second output terminal; and a diode bridge terminal having a pair of a third and fourth output terminals each connected to said first and
15 said second output terminals, wherein said fourth output terminal supplies a current as a driver when outputting a test waveform to a device under test (DUT), and said DUT supplies a load current to said fourth output terminal therefrom by turning the second buffer circuit OFF when judging a status of a response waveform
20 by receiving said waveform from said DUT.

7. A driver circuit integrated with a load current output circuit according to claim 6, wherein said first and second buffer circuits are constituted of a voltage follower of a push-pull operation, provided with a first switch circuit for
25 controlling ON/OFF of a last stage transistor of said first buffer

and a second switch circuit for controlling ON/OFF of a last stage transistor of said second buffer circuit, so that when a test waveform is outputted to a device under test (DUT), said first and second switch circuits operate said first and second buffer circuit so as to supply current from output of both said first and second buffer circuits, and when a status of a response waveform is judged by receiving a response waveform from said DUT, said second switch circuit turn said second buffer circuit into a non-operative state, and said first buffer circuit is controlled by said first switch circuit so as to supply a load current to said DUT by said first buffer circuit and said diode bridge.

8. A driver circuit integrated with a load current output circuit according to claim 7, wherein a constant current portion is provided and said diode bridge circuit is connected to another pair of a fifth and sixth output terminals.

9. A driver circuit integrated with a load current output circuit according to claim 6, wherein a diode opposed to said diode bridge circuit is simultaneously turned ON, and another diode opposed thereto is simultaneously turned OFF.

10. A pin electronic IC provided with said driver circuit integrated with said load current output circuit according to claim 1.

11. A pin electronic IC provided with said driver circuit integrated with said load current output circuit according to

claim 2.

12. A pinelectronic IC provided with said driver circuit integrated with said load current output circuit according to claim 6.

5 13. An IC tester provided with said driver circuit integrated with said load current output circuit according to claim 1.

10 14. An IC tester provided with said driver circuit integrated with said load current output circuit according to claim 2.

15. An IC tester provided with said driver circuit integrated with said load current output circuit according to claim 6.

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